

Personal Factors and Career Adaptability in a Call Centre Work Environment: The Mediating Effects of Professional Efficacy

Nisha Harry

Abstract—The study discussed in this article sought to assess whether a sense of professional efficacy mediates the relationship between personal factors and career adaptability. A quantitative cross-sectional survey approach was followed. A non-probability sample of (N = 409) of which predominantly early career and permanently employed black females in call centres in Africa participated in this study. In order to assess personal factors, the participants completed sense of meaningfulness and emotional intelligence measures. Measures of professional efficacy and career adaptability were also completed. The results of the mediational analysis revealed that professional efficacy significantly mediates the meaningfulness (sense of coherence) and career adaptability relationship, but not the emotional intelligence–career adaptability relationship. Call centre agents with professional efficacy are likely to be more work engaged as a result of their sense of meaningfulness and emotional intelligence.

Keywords—Call centre, professional efficacy, career adaptability, emotional intelligence.

I. INTRODUCTION

THE meanings people impart to their work context and work tasks influence the quality of both their work engagement and their career prospects in the context of high pressure information-based work settings such as call centres.

Meaningfulness is associated with a sense of coherence [1] even in a context which is experienced as challenging [2]. In work settings, meaningfulness relates to people's use of positive reframing as a way of interpreting negative events, which then helps them to view life as more meaningful [3]. Career adaptability, on the other hand, is a psychosocial resource which involves the integration of work self-concept and occupational roles [4]. It is defined by five psychosocial strengths, namely, concern, control, curiosity, cooperation and confidence [5]. Career concern involves a hopeful and optimistic future that fosters involvement in one's career. Career control is rooted in interpersonal autonomy and intrapersonal willpower; a sense of optimising one's vocational future leads to concerns about who owns that future [5]. Career curiosity involves human strengths in exploring the meaning of work and its place in one's life, which is thereby strengthened by exploratory behaviour [5]. Career cooperation refers to the ability to find one's identity through one's roles at work. Career confidence denotes feelings of self-efficacy that

facilitates behaviour that leads to the mastery of developmental tasks [5]. Therefore, courage, optimism, interpersonal skills, hope, perseverance and work ethics are subsumed in the career adaptability syndrome [5]. These attributes presume a level of emotional intelligence when interacting with the work environment.

Emotional intelligence refers to the ability to understand others' feelings, as well as self-control in the use of emotions (interpersonal interaction) [6]. Empirical research supports the view that emotional intelligence has a significant impact on happiness, wellbeing and a quest for meaning in life [7], [8].

Professional efficacy relates to feelings of competency and productivity at work, as well as work persistence and dedication [9]–[11]. Professional efficacy may be the key variable which translates meaningfulness and emotional intelligence into career adaptability.

Work context might influence the extent to which professional efficacy would explain the relationship between the personal factors of sense of meaningfulness and emotional intelligence, and career adaptability. Call centres are highly demanding work settings in which there are contentious issues such as low pay, unstable conditions and the stressful nature of the work owing to the close technological and bureaucratic control of the labour process [12]. The industry has grown tremendously in Africa. Call centres are equipped with modern facilities and amenities, and despite the issues, jobs in this industry are highly sought after amongst entry-level workers. However, work stress has become a serious problem in this environment, with many individuals exhibiting an apathetic attitude [13].

The goal of this study was to assess whether a sense of professional efficacy mediates the relationship between individuals', firstly, sense of meaningfulness and career adaptability and, secondly, emotional intelligence and career adaptability. The importance of this research is accentuated by the seemingly limited research on sense of meaningfulness, emotional intelligence and career adaptability in call centres. The following specific research questions were posed: Are call centre agents' emotional intelligence and meaningfulness significantly related to their career adaptability?

The following sub-questions were formulated:

- a. To what extent does professional efficacy mediate the relationship between meaningfulness and career adaptability?
- b. To what extent does professional efficacy mediate the relationship between emotional intelligence and career

Nisha Harry is with the Department of Industrial Psychology, University of South Africa, Pretoria, South Africa (e-mail: harryn@unisa.ac.za).

adaptability?

II. METHOD

Participants and Setting

The sample consisted of 409 early-career, black call centre agents employed in the call centre industry in Africa. The age of the participants in the sample ranged between 25 years and 40 years. The sample comprised 66% women and 34% men.

III. MEASURING INSTRUMENTS

As measures of personal factors, the call centre workers completed the Orientation to Life Questionnaire [OLQ-29; [1] for meaningfulness and the Assessing Emotions Scale [AES; [14] for emotional intelligence. For the professional efficacy measure, the workers completed the Maslach Burnout Inventory General Scale [MBI-GS] [15]. Worker career adaptability was measured using the Career Adapt-Abilities Scale [CAAS] [16].

The OLQ-29 consists of 29 Likert-type self-rating items to measure sense of coherence. It is scored on a Likert-type scale (1 = comprehensibility [11 items], 2 = manageability [10 items], and 3 = meaningfulness [8 items]). As an example, one of the items reads: 'You anticipate that your personal life in the future will be: Totally without meaning or purpose versus full of meaning and purpose.' Previous studies reported an overall Cronbach's alpha of 0.90 for scores on the OLQ-29 [17], [18]. The reliability of scores from the OLQ-29 in the present study was 0.71.

The AES is a measure of overall emotional intelligence and comprises 33 items. One example item from the scale reads: 'I am aware of my emotions as I experience them'. As reported in [19], a Cronbach's alpha coefficient of 0.71 for scores from the AES using a South African sample. The reliability of scores from the AES in the present sample was found to be 0.87.

The MBI-GS subscale on professional efficacy consists of six items. An example of one of the items reads, 'I have accomplished many worthwhile things in this job'. The scale scored the items on a seven-point Likert scale (1 = exhaustion [5 items], 2 = cynicism [5 items], 3 = professional efficacy [6 items]). The reliability of scores from the MBI-GS professional efficacy subscale in the present study was 0.73.

The CAAS comprises 55 items scores on a five-point Likert-type scale (1 = not strong; 5 = strongest). This is a measure of the five career adaptation dimensions of concern relating to the participant's vocational future (11 items; e.g. 'Planning important things before I start'); sense of control in order to assist his or her preparation for a vocational future (11 items; e.g. 'Making decisions by myself'), curiosity to explore possible selves and future scenarios (11 items; e.g. 'Exploring my surroundings'), cooperation displayed in one's career (11 items; e.g. 'Becoming less self-centred'), and confidence in pursuing aspirations (11 items; e.g. 'Performing tasks efficiently'). As reported in [20], internal consistency reliability values ranging between 0.88 and 0.90 for scores from the CAAS. The Cronbach's alpha coefficient value for

scores from the CAAS in the present study was 0.95.

IV. RESEARCH PROCEDURE AND ETHICAL CONSIDERATIONS

The researcher obtained ethical clearance to conduct the research from the University of South Africa, as well as permission from the human resources managers of the call centres in Africa and the research institution. Participants consented individually to the study. All respondents were assured that their responses would remain anonymous and confidential. Questionnaires were distributed to a sample of 500 call centre agents, however only 409 useable questionnaires were obtained.

V. DATA ANALYSIS

Two simple mediational models, with a more stringent bootstrapping approach as described by [21], were calculated to achieve the objectives of the study.

1. Mediation model 1: The model consists of three variables, meaningfulness (independent variable), professional efficacy (mediating variable) and career adaptability (dependent variable).
2. Mediation model 2: The model consists of three variables, overall emotional intelligence (independent variable), professional efficacy (mediating variable) and career adaptability (dependent variable).

The analyses aimed to examine the magnitude of both the direct and the indirect effects (standardised path coefficients) the variables had on each other. To establish the unique effect of the mediator (professional efficacy) on the dependent variable (career adaptability), the independent variables (meaningfulness and emotional intelligence) were controlled for in both mediation models.

VI. RESULTS

A. Descriptive Statistics

Table I shows that the participants obtained relatively high mean scores on the three variables, with the highest mean score on meaningfulness ($M = 4.91$; $SD = 1.10$) and professional efficacy ($M = 4.86$; $SD = 1.04$).

The correlations between the three variables are in the right direction (positive) and small to moderate in practical effect size ($0.17 \leq r \leq 0.30$).

Table I shows that the participants obtained relatively high mean scores on professional efficacy ($M = 4.86$; $SD = 1.04$) and somewhat lower mean scores on career adaptability ($M = 4.16$; $SD = 0.52$) and emotional intelligence ($M = 4.01$; $SD = 0.65$).

The correlations between the three variables are in the right direction (positive) and small to large in practical effect size ($0.20 \leq r \leq 0.30 \leq 0.55$).

B. Mediating Effects

Mediation model 1: Direct and indirect effects of meaningfulness on career adaptability through professional efficacy.

TABLE I
DESCRIPTIVE STATISTICS

Variables	M	SD	α	Meaningfulness	Professional efficacy	Emotional intelligence
Model 1:						
Meaningfulness	4.91	1.10	0.71	-		
Professional efficacy	4.86	1.04	0.73	0.30**	-	
Career adaptability	4.16	0.52	0.95	0.17*	0.20**	
Model 2:						
Emotional intelligence	4.01	0.65	0.86			-
Professional efficacy	4.86	1.04	0.73			0.29**
Career adaptability	4.16	0.52	0.95		0.20**	0.55***

Note: $n = 409$. *** $p \leq 0.001$. $r \geq 0.30 \leq 0.49$ (medium practical effect size). +++ $r \geq 0.50$ (large practical effect size) M = mean. SD = standard deviation. α = Cronbach's alpha (internal consistency reliability) coefficient.

TABLE II
STANDARDISED DIRECT AND INDIRECT EFFECTS OF MEANINGFULNESS ON CAREER ADAPTABILITY THROUGH PROFESSIONAL EFFICACY

Model 1 Meaningfulness – Career Adaptability		Bootstrapping BC 95% CI		
Mediator	Point estimate	SE	Lower	Upper
Meaningfulness	1.22**	0.07	1.11	1.37
Professional efficacy	0.97**	0.07	0.82	0.01
Career adaptability	0.06**	0.02	0.22	0.004
Total effects				
Meaningfulness – Professional efficacy	0.29**	0.05	0.22	0.40
Professional efficacy – career adaptability	0.08**	0.03	0.02	0.14
Meaningfulness – career adaptability	0.08**	0.02	0.04	0.14
Direct effects				
Meaningfulness- Professional efficacy	0.29**	0.05	0.22	0.40
Professional efficacy – career adaptability	0.08**	0.03	0.02	0.14
Meaningfulness – career adaptability	0.06*	0.02	0.01	0.11
Indirect effects				
Meaningfulness – career adaptability	0.02**	0.01	0.01	0.05

Note: $N = 409$; SE: standard error; ** $p < 0.01$. 95% BC CI: 95% bias corrected confidence interval.

*** $p \leq 0.001$; ** $p \leq 0.01$; * $p \leq 0.05$

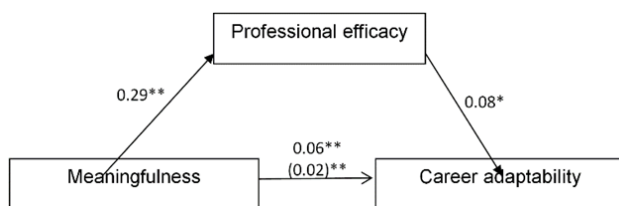


Fig. 1 Model 1: Mediating model examining the direct and indirect relation of meaningfulness and career adaptability through the mediating effect of professional efficacy; Note: Values in parentheses represent the indirect effect of meaningfulness via professional efficacy (mediator) on career adaptability. BC: bias-corrected bootstrap approximation at the 95% corrected confidence interval ($n = 409$). **Standardised path coefficients are significant at $p \leq 0.001$. *Standardised path coefficient is significant at $p \leq 0.05$.

As seen in Table II and in Fig. 1, meaningfulness had significant direct paths to professional efficacy ($\beta = 0.29$; $p \leq$

0.01; 95% CI: 0.22; 0.40) and career adaptability ($\beta = 0.06$; $p \leq 0.05$; 95% CI: 0.01; 0.11), while professional efficacy had a significant direct path to career adaptability ($\beta = 0.08$; $p \leq 0.01$; 95% CI: 0.02; 0.14). Meaningfulness also had a significant indirect effect on career adaptability, as mediated through professional efficacy ($\beta = 0.02$; $p \leq 0.01$; 95% CI: 0.01; 0.05). After accounting for professional efficacy, the strength of the relation of meaningfulness to career adaptability was somewhat diminished. Table II shows that the more reliable bootstrapping bias – corrected for the 95% confidence interval – did not include zero within the range of the lower and upper limits of the confidence intervals [22], suggesting that the indirect pathway between meaningfulness and career adaptability via the mediating effect of professional efficacy was practically significant. The significance of the mediating effect further implies that professional efficacy only partially mediated the relationship between meaningfulness and career adaptability. The ratio of indirect (ab) to total effect (c) used for quantifying and reporting the effect size of indirect effects in mediation models [21] was small ($ab/c = 0.25$, indicating that professional efficacy explained only 25% of the mediating effect).

Mediation model 2: Direct and indirect effects of emotional intelligence on career adaptability through professional efficacy.

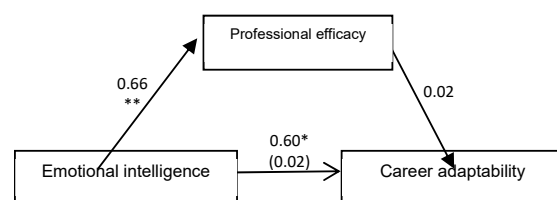


Fig. 2 Model 2: Mediating model examining the direct and indirect relation of emotional intelligence and career adaptability through the mediating effect of professional efficacy; Note: Values in parentheses represent the indirect effect of managing others' emotions via professional efficacy (mediator) on career adaptability. BC: bias-corrected bootstrap approximation at the 95% corrected confidence interval (two-sided). $n = 409$. **Standardised path coefficients are significant at $p \leq 0.001$. *Standardised path coefficient is significant at $p \leq 0.05$.

TABLE III
STANDARDISED DIRECT AND INDIRECT EFFECTS OF EMOTIONAL
INTELLIGENCE ON CAREER ADAPTABILITY THROUGH PROFESSIONAL
EFFICACY

Model 1 Emotional Intelligence – Career Adaptability			Bootstrapping BC 95% CI	
Mediator	Point estimate	SE	Lower	Upper
Emotional intelligence	0.21**	0.02	0.17	0.26
Professional efficacy	0.99**	0.07	0.82	1.13
Career adaptability	0.18**	0.01	0.15	0.21
Total effects				
Emotional intelligence – Professional efficacy	0.29**	0.06	0.17	0.40
Professional efficacy – career adaptability	0.04	0.04	-0.05	0.12
Emotional intelligence – career adaptability	0.55**	0.04	0.46	0.63
Direct effects				
Emotional intelligence – Professional efficacy	0.29**	0.06	0.17	0.40
Professional efficacy- career adaptability	0.04	0.04	-0.05	0.12
Emotional intelligence – career adaptability	0.54**	0.04	0.45	0.62
Indirect effects				
Emotional intelligence – career adaptability	0.01	0.01	-0.01	0.05

Note: N = 409; SE: standard error; ** $p < 0.01$. 95% BC CI: 95% bias corrected confidence interval.

*** $p \leq 0.001$; ** $p \leq 0.01$; * $p \leq 0.05$

As seen in Table III and in Fig. 2, although emotional intelligence had significant, direct paths to professional efficacy ($\beta = 0.29$; $p \leq 0.01$; 95% CI: 0.17; 0.40) and career adaptability ($\beta = 0.54$; $p \leq 0.01$; 95% CI: 0.45; 0.62), professional efficacy did not have a significant direct path to career adaptability when controlling for emotional intelligence. The bootstrapping confidence interval range also included zero, indicating a non-significant mediating effect for the model. The indirect effect also showed that emotional intelligence did not have an indirect (mediating) effect on career adaptability through professional efficacy.

VII. DISCUSSION

The findings suggest that meaningfulness as an aspect of people's sense of coherence strengthens their sense of professional efficacy in a high stress environment, which in turn partially strengthens their career adaptability (proactivity and resourcefulness in dealing with stressful events and situations relating to their career management). Previous research has revealed that meaningfulness is regarded as a motivational aspect in terms of which an individual can make sense of life emotionally [23]. These findings are likely explained by the fact that when people have some understanding in their lives, they feel they are understood by others, and perceive that they are able to manage situations [1]. The most important motivation is that they perceive life as meaningful and feel able to continue [1]. By definition, professional efficacy includes aspects of meaning in that an individual would consider his or her accomplishments and abilities to be worthwhile [24]. Professional efficacy mediates the relationship between emotional intelligence and career

adaptability, but to a lesser extent. References [25]-[27] report that individuals who are able to regulate their emotional states are at lower risk of burnout.

People with a high level of career adaptability also need to have emotional intelligence and a sense of meaningfulness in order to successfully manage the demands of a work environment characterised by rapid workflow changes, as is the case with call centres. Similarly, individuals with a sense of motivation (meaningfulness) to continue in their job are likely to have the ability to deal with emotions in the workplace, thus reducing their occupational stress and enhancing their psychological wellbeing.

VIII. LIMITATIONS OF THE STUDY

Since the study was confined to call centre agents only, it is not possible to generalise the findings to other occupational contexts. The study was cross-sectional in nature, and therefore, it was also not possible to ascertain the causal direction of relationships. Since the cross-sectional nature of the research design does not allow for causal inferences to be made from the data analyses [28], correlational inferences were used to identify the extent to which the mediator variable (professional efficacy) accounts for the direct and indirect relationships between the independent variables (meaningfulness and emotional intelligence) and the dependent variable (career adaptability). In addition, the study was limited to predominantly single, employed black females in their early-career development stage in a call centre work environment and, thus, the results could not be generalised to other occupations, age, race or gender contexts.

IX. CONCLUSIONS

Overall, the results provide evidence of the importance of considering call centre agents' meaningfulness, emotional intelligence, career adaptability and professional efficacy as constructs that such people can use to navigate the stress and uncertainties relating to career-related transitions and changes. Developing professional efficacy may help to strengthen the relationship between meaningfulness and career adaptability in the information management industry sector.

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